

**THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE
PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:**

1. A combination of polynucleotides for amplification and detection of a portion of a *L. monocytogenes hlyA* gene, said portion comprising the sequence set forth in SEQ ID NO:30, said combination comprising:
 - (a) a first polynucleotide primer comprising at least 7 nucleotides of the sequence as set forth in SEQ ID NO:1;
 - (b) a second polynucleotide primer comprising at least 7 nucleotides of a sequence complementary to SEQ ID NO:1; and
 - (c) a polynucleotide probe comprising at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:29, or the complement thereof.
2. The combination of polynucleotides according to claim 1, wherein said polynucleotide probe comprises at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:30, or the complement thereof.
3. The combination of polynucleotides according to claim 1 or 2, wherein said first and second polynucleotide primers comprise at least 7 consecutive nucleotides of the sequence as set forth in any one of SEQ ID NOs: 2 to 28, or the complement thereof.
4. The combination of polynucleotides according to any one of claims 1, 2 or 3, wherein said portion of a *L. monocytogenes hlyA* gene is less than or equal to 140 nucleotides in length.
5. The combination of polynucleotides according to any one of claims 1 to 4, wherein said first polynucleotide primer comprises at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:31 and said second polynucleotide primer comprises at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:32.

6. A pair of polynucleotide primers for amplification of a portion of a *L. monocytogenes hlyA* gene, said portion comprising the sequence set forth in SED ID NO:30, said pair of polynucleotide primers comprising:
 - (a) a first polynucleotide primer comprising at least 7 nucleotides of the sequence as set forth in SEQ ID NO:1; and
 - (b) a second polynucleotide primer comprising at least 7 nucleotides of a sequence complementary to SEQ ID NO:1.
7. The pair of polynucleotide primers according to claim 6, wherein said first and second polynucleotide primers comprise at least 7 nucleotides of the sequence as set forth in any one of SEQ ID NOs:2 to 28.
8. The pair of polynucleotide primers according to claim 6 or 7, wherein said portion of a *L. monocytogenes hlyA* gene is less than or equal to 140 nucleotides in length.
9. The pair of polynucleotide primers according to any one of claims 6 to 8, wherein said first polynucleotide primer comprises at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:31 and said second polynucleotide primer comprises at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:32.
10. A method of detecting *L. monocytogenes* in a sample, said method comprising:
 - (a) contacting a test sample suspected of containing, or known to contain, a *L. monocytogenes* target nucleotide sequence with the combination of polynucleotides according to any one of claims 1 to 6 under conditions that permit amplification and detection of said target sequence, and
 - (b) detecting any amplified target sequence,wherein detection of amplified target sequence indicates the presence of *L. monocytogenes* in the sample.

11. The method according to claim 10, wherein said first polynucleotide primer comprises a sequence as set forth in SEQ ID NO:31, said second polynucleotide primer comprises a sequence as set forth in SEQ ID NO:32 and said polynucleotide probe comprises a sequence as set forth in SEQ ID NO:33, or the complement thereof.
12. The method according to claim 10 or 11, further comprising a step to enrich the microbial content of the test sample prior to step (a).
13. A kit for the detection of *L. monocytogenes* in a sample, said kit comprising:
 - (a) a first polynucleotide primer comprising at least 7 nucleotides of the sequence as set forth in SEQ ID NO:1;
 - (b) a second polynucleotide primer comprising at least 7 nucleotides of a sequence complementary to SEQ ID NO:1; and
 - (c) a polynucleotide probe comprising at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:29, or the complement thereof.
14. The kit according to claim 13, wherein said polynucleotide probe comprises at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:30, or the complement thereof.
15. The kit according to claim 13 or 14, wherein said first and second polynucleotide primers comprise at least 7 consecutive nucleotides of the sequence as set forth in any one of SEQ ID NOs: 2 to 28, or the complement thereof.
16. The kit according to any one of claims 13, 14 or 15, wherein said first and second primer amplify a portion of a *L. monocytogenes hlyA* gene is less than or equal to 140 nucleotides in length.
17. The kit according to any one of claims 13 to 16, wherein said first polynucleotide primer comprises at least 7 consecutive nucleotides of the

sequence as set forth in SEQ ID NO:31 and said second polynucleotide primer comprises at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:32.

18. The kit according to any one of claims 13 to 17, wherein said first polynucleotide primer comprises a sequence as set forth in SEQ ID NO:31, said second polynucleotide primer comprises a sequence as set forth in SEQ ID NO:32 and said polynucleotide probe comprises a sequence as set forth in SEQ ID NO:33, or the complement thereof.
19. An isolated *L. monocytogenes* specific polynucleotide having the sequence as set forth in SEQ ID NO:29, or the complement thereof.
20. A polynucleotide primer of between 7 and 100 nucleotides in length for the amplification of a portion of a *L. monocytogenes hlyA* gene, said polynucleotide comprising the sequence as set forth in any one of: SEQ ID NOs:31, 32, 34 or 36.
21. A polynucleotide probe of between 7 and 70 nucleotides in length for detection of *L. monocytogenes*, said polynucleotide probe comprising at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:30, or the complement thereof.
22. The polynucleotide probe according to claim 21, wherein said polynucleotide comprises the sequence as set forth in SEQ ID NO:34, or the complement thereof.
23. The polynucleotide probe according to claim 22, wherein said polynucleotide comprises the sequence as set forth in any one of SEQ ID NOs:33, 34, 35, or 36.

24. The polynucleotide probe according to any one of claims 21, 22 or 23, wherein said polynucleotide further comprises a fluorophore, a quencher, or a combination thereof.